



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,654	01/11/2000	John A. Lawton	PM-263288-D1029	5938

909 7590 04/26/2002  
PILLSBURY WINTHROP, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER	
HAMILTON, CYNTHIA	
ART UNIT	PAPER NUMBER

1752  
DATE MAILED: 04/26/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/481,654

Applicant(s)

LAWTON ET AL.

Examiner

Cynthia Hamilton

Art Unit

1752

-- Th MAILING DATE of this communication appears on the cov r sheet with th correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 9d 4-25-02 1) ☒ Responsive to communication(s) filed on 3/27/01, 4/05/01, 10/31/01, 11/01/01 and 2/7/02.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7, 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Supplemental Declaration For Reissue.

### DETAILED ACTION

1. Claims 1-2 from the original patent have been amended. Claims 3-77 are claims added beyond issued patent claims. Claims 78-83 have been cancelled. This action is in response to Amendment filed October 31, 2001, Supplemental Amendment filed November 01, 2001, and Supplemental Amendment filed February 7, 2002 after the Interview of February 7, 2002. The amendments of March 27, 2001 and June 8, 2001 were not entered due to form of claims presented. The last rejection of claims in this application was in the Office Action of October 8, 2000. Instant claims 71-77 are newly added since the Office Action of October 8, 2000.

2. **The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

Art Unit: 1752

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 71-74, 77 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tsao et al in view of data sheets. See Examples in Tsao et al. The compositions used by Tsao et al inherently possess the properties required in instant claims 71-74, 77. In Tsao et al, see especially Example 2, formulation 6, wherein the epoxy mixture is 3,4-epoxycyclohexolymethyl-3,4-epoxycyclohexane carboxylate, i.e. a cycloaliphatic epoxy as required in instant claim 77, and diglycidyl ether of bisphenol A. One epoxy is inherently more viscose and of slower polymerizing rate. The blend of radically polymerizable components used by Tsao et al in Example 2, formulation 6 is comprised of diethylene glycol diacrylate, trimethylolpropane triacrylate and 2-ethyl hexyl acrylate. The photo-generating acid precursor in Tsao et al is triphenyl sulfonium hexafluorophosphate and the free radical initiator is phenyl-acetophenone. With respect to water as a component, the examiner holds that very small percentages of water would be present in the compositions of Tsao et al due to absorption of water from a humid atmosphere and that this is in the range of water designated present by instant claim 72. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography

submitted by applicants in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. Thus, the compositions of Tsao et al also anticipate the instant invention of claim 72.

6. Claims 71-74, 77 are rejected under 35 U.S.C. § 102(b) as being anticipated by Land (4,694,029) as evidenced by RN 25085-98-7 and data sheets submitted by applicants. See Example 3, Compositions 5-6. The compositions used by Land inherently possess the properties required in instant claims 71-74, 77. UVR-6110 is identified by RN 25085-98-7 as the same compound as Cyracure Resin UVR-6105 used by applicants. Epon 828 is inherently the higher viscosity, slower polymerizing epoxy when matched with UVR-6110. With respect to water as a percentage specific component, the examiner holds that very small percentages of water would be present in the compositions of Land due to absorption of water from a humid atmosphere and that this is in the range of water designated present by instant claim 72. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. Thus, the compositions of Land also anticipate the instant invention of claim 72.

7. Claims 71-77 are rejected under 35 U.S.C. § 102(e) as being anticipated by Steinmann et al (5,476,748) or under 35 U.S.C. 102(b) as being anticipated by Steinmann et al (CA 2,111,718) as evidenced by data sheets submitted by applicants. See particularly Examples 12-14 in either Steinmann et al which are derived from the same Swiss application. With respect to instant claims 71-77, Steinmann et al discloses all the instant composition and the use of the

Art Unit: 1752

composition in stereolithographic methods of molding as set forth in the first few paragraphs of either reference. With respect to water as a percentage specific component instant claim 72, the examiner holds that very small percentages of water would be present in the compositions of Steinmann et al. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. See also col. 4, lines 7-8, col. 9, lines 5-8 in Steinmann et al (5,476,748).

8. Claims 71-77 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ohkawa et al as evidenced by data sheets submitted by applicants. See Examples 5-6 and 10 Ohkawa et al. wherein the mixture of epoxides inherently possesses the properties of cure and viscosity set forth in the instant claims. With respect to water as a percentage specific component instant claim 72, the examiner holds that very small percentages of water would be present in the compositions of Ohkawa et al. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins.

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1752

11. Claims 3-18 and 63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "said high-viscosity, slow-curing first epoxy resin" in line 9. There is insufficient antecedent basis for this limitation in the claim. There is no "high-viscosity, slow-curing" found. What is found is "a first epoxy resin" that "polymerizes as a slower rate and having a higher neat viscosity than at least one other epoxy resin present". The examiner suggests "said first epoxy resin" would be sufficient by itself to remove the problem with the limitation in line 9 now in question.

12. Assignee consent filed March 27, 2001 removes objection under 37 C.F.R. 1.172(a).

13. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5707780 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

14. Claims 1-2, 19-62 and 64-70 would be allowable with the submission of a supplemental Declaration .



Art Unit: 1752

15. Applicants are given notice that allowance of this application will require a Supplemental Declaration for Reissue and correction of the missing zip code for Jonathan V. Casper as well meeting the requirements of 37 CFR 1.175 at time of allowance.

16. Claims 1-77 are rejected as being based upon a defective reissue Declaration under 35 U.S.C. 251. The oath does not now set forth the error and correction as currently made. See 37 CFR 1.175 (b) (1). All claims stand or fall together under the issue of a defective reissue Declaration.

The nature of the defect(s) in the Declaration is set forth in the discussion above in this Office action. A blank copy of a supplemental Declaration form for Reissue is attached to this action that should be submitted upon allowance.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

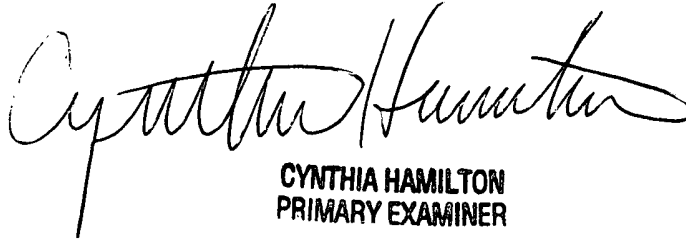
Art Unit: 1752

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 0661.

C. Hamilton  
April 25, 2002



CYNTHIA HAMILTON  
PRIMARY EXAMINER

Please type a plus sign (+) inside this box → ☐

PTO/SB/51S (08-00)  
Approved for use through 12/30/2000. OMB 0651-0033  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>SUPPLEMENTAL DECLARATION FOR REISSUE PATENT APPLICATION TO CORRECT "ERRORS" STATEMENT (37 CFR 1.175)</b>	<b>Attorney Docket Number</b>	
	<b>First Named Inventor</b>	
	<b>COMPLETE</b>	
	<b>Application Number</b>	/
	<b>Filing Date</b>	
	<b>Group Art Unit</b>	
	<b>Examiner Name</b>	

I/We hereby declare that:

Every error in the patent which was corrected in the present reissue application, and which is not covered by the prior oath(s) and/or declaration(s) submitted in this application, arose without any deceptive intention on the part of the applicant.

I/We hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

<b>Name of Sole or First Inventor:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
<b>Name of Second Inventor:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
<b>Name of Third Inventor:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
<b>Name of Fourth Inventor:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	

☐ Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

[Page 1 of 1]

Burden Hour Statement: This form is estimated to take 0.03 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

